

**BY THE ORDER OF
THE COMMANDER**



**ANDREWS AIR FORCE BASE
INSTRUCTION 21-105**

17 DECEMBER 2003

Maintenance

**CRASH DAMAGED/DISABLED AIRCRAFT
RECOVERY PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Managing Aerospace Equipment Maintenance*. It establishes responsibilities and procedures necessary for Crash Damaged/Disabled Aircraft Recovery (CDDAR) in the Andrews AFB area of responsibility to include all host and transient aircraft. All agencies involved with recovery operations will ensure compliance with this instruction to ensure a cooperative, coordinated response to CDDAR situations. This instruction is written in accordance with (IAW) AFI 21-101, *Aerospace Equipment Maintenance Management*, AMCSUP1 and Disaster Preparedness Operations Plan 32-1.

1. General. CDDAR is the ability to move damaged or disabled aircraft without secondary damage utilizing trained personnel and specialized equipment.

2. Responsibilities:

2.1. The on-scene commander (OSC) as determined by the Disaster Preparedness Operations Plan 32-1 Annex A is the controlling authority for all recovery activities.

2.1.1. Assures expedient, cooperative responses to CDDAR situations by MXG, personnel, Fire Protection and other essential agencies.

2.2. The 89 MXG commander (or designated representative):

2.2.1. Directs crash recovery operations once OSC releases the aircraft.

2.2.2. Establishes CDDAR capability in accordance with applicable mission design series (MDS) technical data.

2.2.3. Ensures resources and trained personnel are available to perform responsibilities of CDDAR.

2.3. The maintenance operations center (MOC) is the focal point for receipt and transfer of all in-flight or ground emergency information within the Andrews AFB area of responsibility. MOC shall immediately establish and maintain communications with Aircraft Branch/Helicopter Branch (AB/HB) production supervisor to coordinate recovery actions. In addition, MOC shall contact all applicable agencies to respond as expeditiously as possible.

2.4. Andrews Support Division Manager:

2.4.1. Ensures personnel are trained and resources are available for CDDAR.

2.4.2. Ensure the CDDAR OI provides for coordinated response to CDDAR situations by aircraft maintenance flight line personnel, Fire Protection and other essential agencies.

2.5. Andrews Support Division Director of Maintenance:

2.5.1. Ensures viability of unit CDDAR.

2.5.2. Ensures applicable personnel are trained to protect personnel and prevent further damage to aircraft, equipment and other resources.

2.5.3. Review support agreements to help assess limits of internal unit capabilities and coordinate with other tenants for resources over and above that possessed.

2.6. Andrews Support Division Aircraft and Helicopter Branch Managers:

2.6.1. Ensure personnel are thoroughly familiar with CDDAR and understand local procedures designed to protect personnel and prevent further damage to aircraft, equipment and other resources.

2.6.2. Review support agreements to help assess limits of internal unit capabilities and coordinate with tenants for resources over and above that possessed.

2.7. 113th Wing Air National Guard Maintenance Squadron:

2.7.1. Fuels Section:

2.7.1.1. When required, ensures hydrazine response teams are formed with only team members/supervisors that hold fuel maintenance AFSC and integrate them into CDDAR program.

2.8. Andrews Support Division Aircraft Branch (AB):

2.8.1. Branch Manager:

2.8.1.1. Designate a CDDAR program manager.

2.8.1.2. Ensures compliance with CDDAR program responsibilities.

2.8.2. CDDAR program manager or designee will:

2.8.2.1. Be prepared to rapidly deploy crash recovery equipment and personnel for 89 AW aircraft as directed by HQ AMC/LGRC in order to recover AMC assets.

2.8.2.2. Establish a trained crash recovery team with sufficiently trained personnel to perform CDDAR duties.

2.8.2.3. Review support agreements to help assess limits of internal capabilities and coordinate with tenants for resources over and above that possessed.

2.8.2.4. Develop and maintain initial response checklists to protect personnel, aircraft and

other property from further damage, etc.

2.8.2.5. Maintain and distribute telephone numbers/web site references of key personnel and agencies.

2.8.2.6. Keep current status of CDDAR equipment availability and its location.

2.8.2.7. Maintain procedures to obtain equipment through lateral or contract sources if not organically possessed and procedures for getting equipment when needed.

2.8.2.8. Verify local defuel and fuel spill control cleanup capabilities exist.

2.8.2.9. Conduct quarterly tabletop exercises to discuss possible responses to a variety of scenarios, assess personnel capabilities, exercise checklists, validity of phone numbers, etc.

2.8.2.10. Review overall capability to meet aircraft changes on a monthly basis.

2.8.2.11. Train transient alert (T/A) personnel to act as initial crash recovery team members and augment the crash recovery team as required.

2.8.2.12. Maintain all necessary CDDAR equipment in support of the aircraft assigned to the 89 AW.

2.8.2.13. Deploy the crash recovery team and equipment as directed.

2.8.2.14. Perform and track inspections, repairs and storage of crash recovery equipment.

3. Training:

3.1. Personnel will be thoroughly familiar with local procedures designed to protect individuals and prevent further damage to aircraft, equipment and other resources.

3.2. Members of the crash recovery team shall be trained to respond to common incidents requiring CDDAR, e.g. blown/flat tires, aircraft departing prepared surfaces and major fuel spills.

3.3. Sufficient personnel will be trained on the use of airbag and/or sling recovery systems.

3.4. Recovery training exercises will be conducted on an annual basis.

3.5. All personnel designated as initial crash recovery response members will complete a one-time crash recovery orientation class given by the CDDAR program manager and will be identified in CAMS by use of a course code and documented on the job qualification record.

4. Procedures. In the event of a crashed or disabled aircraft mishap, all affected agencies ensure compliance with the following:

4.1. Notification and crash recovery team and response:

4.1.1. MOC shall notify the aircraft or helicopter branch production supervisor of an in-flight or ground emergency.

4.1.2. The aircraft or helicopter branch production supervisor will contact the MOC who will immediately notify the crash recovery team to respond as directed.

4.1.3. The aircraft and helicopter branch production supervisors will provide the initial response, monitor the situation, and ensure recovery personnel are notified and dispatched to the scene as soon as directed by the OSC via the MOC.

4.1.4. The aircraft and helicopter branch production supervisors will be thoroughly familiar with CDDAR and understand local procedures designed to protect personnel and prevent further damage to aircraft, equipment and other resources

4.1.5. The aircraft and helicopter branch production supervisors will ensure personnel are prepared to assist and provide expertise in CDDAR situations.

4.1.6. MOC will notify the applicable production supervisor when the OSC terminates the emergency.

4.2. Performance of crash recovery actions:

4.2.1. The crash recovery team manages all recovery actions in coordination with the OSC.

4.2.2. The crash recovery team chief maintains continuous contact with the OSC, applicable production supervisor and MOC in regards to the recovery process and any support requirements.

4.2.3. The OSC coordinates with the disaster control group (DCG) for the procurement of aircraft specific equipment, recovery materials, cranes and commercial support equipment not available on base.

4.2.4. The crash recovery team will follow all applicable T.O.'s and safety procedures while conducting aircraft recovery.

5. CDDAR Continuity Book (reference [Attachment 2](#)). The CDDAR continuity book is maintained by the CDDAR program manager, is reviewed/updated quarterly to assess personnel capabilities, exercise checklists, validity of phone numbers, etc. and includes the following:

5.1. CDDAR team member list.

5.2. Support agreements with other Andrews AFB tenant units.

5.3. Initial response checklist.

5.4. Telephone numbers/web site references of key personnel and agencies.

5.5. CDDAR response equipment matrix indicating status and location.

5.6. Pre-identified non-organic CDDAR support equipment list with 24/7 points of contact.

5.7. Local defuel and fuel spill capabilities.

5.8. Tabletop exercises schedule to discuss possible responses to a variety of scenarios.

5.9. Equipment inspection log.

5.10. List of trained CDDAR personnel.

5.11. Recovery capabilities according to MDS.

5.12. Other agencies obligations to provide safety and environmental protection support.

5.13. Current list or matrix of equipment, resources and personnel capabilities for CDDAR.

5.14. CDL licensed driver listing and training forecast.

DAVID S. GRAY, Brigadier General, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 21-1, Managing Aerospace Equipment Maintenance

AFI 21-101, Aerospace Equipment Maintenance Management

AFI 21-101 AMC SUP1, Aerospace Equipment Maintenance Management

OPLAN 32-1, Disaster Preparedness Operations Plan

Abbreviations and Acronyms

AB—Aircraft Branch

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFSC—Air Force Specialty Code

AFTO—Air Force Technical Order

CAMS —Core Automated Maintenance System

CDDAR—Crash Damaged/Disabled Aircraft Recovery

CDL—Commercial Drivers License

DCG—Disaster Control Group

HB—Helicopter Branch

IAW—In Accordance With

MB—Maintenance Branch

MDS—Mission Design Series

MOC—Maintenance Operations Center

MXG—Maintenance Group

OI —Operational Instruction

OPLAN—Operations Plan

OSC—On-Scene Commander

T/A—Transient Alert

T.O.—Technical Order

Attachment 2

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